Case 3596

Eusparassus Simon, 1903 (Arachnida Araneae, SPARASSIDAE): proposed conservation of the generic name

Majid Moradmand

Department of Biology, Faculty of Science, University of Isfahan, Isfahan, Iran & Arachnology, Senckenberg Research Institute, Senckenberganlage 25, 60325 Frankfurt am Main, Germany

(e-mail: Majid.Moradmand@senckenberg.de)

Peter Jäger

Arachnology, Senckenberg Research Institute, Senckenberganlage 25, 60325 Frankfurt am Main, Germany (e-mail: Peter.Jaeger@senckenberg.de)

Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the widely used generic name *Eusparassus* Simon, 1903 for a well-known huntsman spider genus from Africa and Eurasia currently with 30 known valid species. The name is threatened by its little-used senior synonym *Cercetius* Simon, 1902. Simon (1902) established the name *Cercetius* for a monotypic taxon based on a juvenile specimen of *C. perezi* Simon, 1902. The generic name has never been used as valid except in catalogues and other lists. The discovery of adult specimens of *C. perezi* in the type locality and nearby regions supports the synonymy of *Cercetius* with *Eusparassus*. The putative junior synonym *Eusparassus* is however a long-accepted name and it should be conserved to maintain stability of nomenclature in this taxonomic group.

Keywords. Nomenclature; taxonomy; Eusparassus; Cercetius; Cercetius perezi; Eusparassus dufouri; huntsman spiders; Persian Gulf; Arabian Peninsula.

- 1. The genus Cercetius Simon, 1902 (p. 253) is a monotypic taxon based on Cercetius perezi Simon, 1902. The immature holotype (MNHN 1658–21936) was collected in 1901 during the French mission to the coastal terrestrial regions of the Persian Gulf conducted by J. Bonnier and Ch. Perez. The type locality is Dibba, a coastal geographic region at the northeastern tip of the Arabian Peninsula. Dibba currently lies in the United Arab Emirates and the Sultanate of Oman. Simon (1902) stated the close similarities in traits between Cercetius and Eusparassus (sub Sparassus), in particular the arrangement and relative size of the eyes. He classified Cercetius in the subfamily Sparassinae. Cercetius perezi was cited again by Simon (1903, p. 1026) as a new record from Somalia. Since this time, the monotypic genus Cercetius has been used only in catalogues, i.e. Petrunkevich (1928) and Platnick (2012), and a generic checklist and identification key (Jäger & Kunz, 2005).
- 2. Eusparassus Simon, 1903 (pp. 1020, 1023, 1025) is a well-known huntsman spider genus in Africa and Eurasia currently with 30 known nominal species. Moradmand & Jäger (2012) revised the genus Eusparassus in Eurasia and presented

the diagnostic characters of this genus. The type species is *Eusparassus dufouri* Simon, 1932 (p. 890), which was proposed for specimens originally mistakenly identified as *Sparassus argelasius* by Latreille (1818).

- 3. The genus *Sparassus* Walckenaer, 1805 originally included five species one of which was '*Sparassus argelasius*' based on a single male from Bordeaux, France. Walckenaer (1805, p. 40) presented no description or illustration of '*S. argelasius*', which is therefore a nomen nudum. The following year, Walckenaer (1806, p. 146, table 2) provided a description and illustration of this male specimen under the name *Sparassus argelasius*. This species is currently assigned to the genus *Olios* Walckenaer, 1837. Jäger (1999) proposed the synonymy of *Sparassus* Walckenaer, 1805 with *Micrommata* Latreille, 1804.
- 4. Latreille (1818, pp. 516, 517) examined two female specimens from Spain and mistakenly identified them as 'Micromata argelasia'. Micromata was an incorrect original spelling of Micrommata in Latreille (1804); Latreille (1806, pp.115, 127) amended the spelling of the genus name into 'Micrommata'. According to Articles 32.2.2 and 33.2.2 of the Code this is a justified emendation and the incorrect original spelling ('Micromata') is considered a lapsus calami (original Greek word: το ομμα eye). Latreille (1806) used Micrommata for the first time and used it in this format in his following publications (e.g. Latreille, 1817, p. 92; 1818, p. 515); see Bonnet (1957, p. 2886) for all citations also of subsequent authors. Latreille (1818, p. 516) again used erroneously the incorrect spelling Micromata (which was probably a typographical error) along with the correct spelling on p. 515).
- 5. Simon (1903, p. 1020) noted that S. argelasius Walckenaer, 1805 was a nomen nudum and did not enter nomenclature. He considered that Latreille (1818) provided the valid description for Walckenaer's species as Micrommata argelasia, but it is likely that Simon (1903) overlooked the valid description of S. argelasius Walckenaer, 1806. Simon (1903, p. 1025) established a new genus Eusparassus and designated Latreille's (1818) Micrommata argelasia (based on the misidentified female specimens) as the type species. Simon (1932, pp. 889, 890) pointed out the misidentification by Latreille (1818) and established the name E. dufouri for Spanish specimens previously misidentified as 'Sparassus argelasius' by Latreille. Simon (1932) designated E. dufouri as the type species of the genus Eusparassus and assigned Walckenaer's 'Sparassus argelasius' to the genus Olios Walckenaer, 1836. The type species of Eusparassus was misidentified under the name 'E. argelasius', thus dufouri was selected as the valid specific name for the type species of the genus Eusparassus. This designation meets the conditions of Article 70.3.2 (Misidentified type species). According to Article 72.4.2, the type series of E. dufouri consists of the female specimens which had been misidentified (M. argelasia sensu Latreille, 1818). Since it is generally understood that the material of Latreille in the Muséum d'Histoire Naturelle (Paris) is lost, a neotype of E. dufouri was designated, properly described and illustrated by Moradmand & Jäger (2012).
- 6. Specimens that were later assigned to *Eusparassus* were apparently known to Simon prior to proposing the name *Cercetius*, at least since 1880 (Simon 1880, p. 290). Additionally, *Eusparassus* is the type genus of the family-group name Eusparassidae Järvi, 1912, which even if no longer used as a family name (Jäger, 1999), is still an available name as subfamily Eusparassinae (e.g. Dunlop et al., 2011; Moradmand & Jäger, 2012).

7. Cercetius (due to its juvenile type) has never been properly diagnosed. Somatic features of the holotype of C. perezi fit well with those of the genus Eusparassus. The cheliceral dentition, intermarginal denticles of the chelicerae, arrangement of the eyes, spination pattern, leg formula and presence of a dark marking on the ventral opisthosoma seen in the immature holotype are found in the newly discovered adult specimens from the type locality and nearby regions. The copulatory structures of the adults clearly place C. perezi in the genus Eusparassus: male with a parallel U-shaped tegulum and embolus, presence of an embolus membrane near to the embolus tip, a well-developed dorsal RTA (Retro-lateral tibial apophysis) and a ventral RTA reduced in size; female's epigyne with two large lateral lobes, simply long and parallel copulatory ducts which lead to more complex turning loops and a glandular process (Moradmand; in preparation).

8. Eusparassus is a long-accepted name and has been widely used after its original designation in 1903 in at least 25 taxonomic papers (Simon, 1909, 1932; Strand, 1906, 1907, 1908; Järvi, 1912, 1914; Reimoser, 1919; Roewer, 1928, 1962; Gravely, 1931; Caporiacco, 1935, 1939, 1941; Schenkel, 1936; Denis 1945, 1947, 1958;, Barrientos & Urones, 1985; Jäger, 1999, 2001; Song et al., 1999; Jäger & Yin, 2001; Jäger & Kunz, 2005; Urones, 2006), in four catalogues and faunistic studies (Petrunkevich, 1928; Roewer, 1955; Deltshev, 2011; Platnick, 2012), one palaeozoological (amber) investigation (Dunlop et al., 2011) and one contribution to developmental biology and

natural history (Gabriel, 2011).

9. For the sake of nomenclatural stability we request that the junior name *Eusparassus* be given precedence over the senior synonym *Cercetius*. Article 23.9.2 cannot be applied because *Cercetius* was established in 1902, thus the conditions of Article 23.9.1.1 are not met. However the conditions of Article 23.9.1.2 are met, since the junior synonym *Eusparassus* has been used in 31 publications, published by 27 different authors. Therefore we refer this case to the Commission for a ruling under the plenary power.

10. The International Commission on Zoological Nomenclature is accordingly

asked:

(1) to use its plenary power to give the name *Eusparassus* Simon, 1903 precedence over *Cercetius* Simon, 1902, whenever the two are considered to be synonyms;

(2) to place on the Official List of Generic Names in Zoology the following names:

(a) Eusparassus Simon, 1903, type species by subsequent designation by Simon (1932) Eusparassus dufouri Simon, 1932, with the endorsement that it is to be given precedence over Cercetius Simon, 1902, whenever the two are considered to be synonyms;

(b) Cercetius Simon, 1902, type species by monotypy Cercetius perezi Simon, 1902, with the endorsement that it is not to be given priority over Eusparassus Simon, 1903, whenever the two are considered to be synonyms;

(3) to place on the Official List of Specific Names in Zoology the following names:

- (a) dufouri Simon, 1932, as published in the binomen Eusparassus dufouri Simon, 1932, the specific name of the type species of Eusparassus Simon, 1903;
- (b) perezi Simon, 1902, as published in the binomen Cercetius perezi Simon, 1902, the specific name of the type species of Cercetius Simon, 1902.

Acknowledgements

We gratefully acknowledge all the anonymous Commissioners for their helpful comments. We are grateful to Dr Jason Dunlop (*Museum für Naturkunde, Berlin*) for his useful suggestions on preparing the proposal. Majid Moradmand thanks the Ministry of Science, Research and Technology of Iran for providing financial support for his research in the form of a PhD scholarship.

References

- Barrientos, J.A. & Urones, M.C. 1985. La colección de araneidos del Departamento de Zoología de la universidad de Salamanca, V: arañas clubionoideas y tomisoideas. *Boletin de la Asociacion Espanola de Entomologia*, 9: 349–366.
- Bonnet, P. 1957. Bibliographia araneorum. Toulouse, 2(3): 1927–3026.
- Caporiacco, L. di. 1935. Aracnidi dell'Himalaia e del Karakoram, raccolti dalla Missione italiana al Karakoram (1929-VII). *Memoire della Societa Entomologica Italiana*, 13: 161–263.
- Caporiacco, L. di. 1939. Arachnida *In*: Missione biologica nel paese dei Borana. Raccolte zoologiche. *Reale Accademia d'Italia*, 3: 303–385.
- Caporiacco, L. di. 1941. Arachnida (esc. Acarina). *Missione biologica Sagan-Omo*, **12**(6): 1–159. **Deltshev**, C. 2011. The faunistic diversity of cave-dwelling spiders (Arachnidae, Araneae) of Greece. *Arachnologische Mitteilungen*, **40**: 23–32.
- Denis, J. 1945. Descriptions d'araignées nord-africaines. Bulletin de la Société d'Histoire Naturelle, 79: 41-57.
- Denis, J. 1947. Spiders in Results of the Armstrong College expedition to Siwa Oasis (Libyan Desert), 1935. Bulletin de la Société Fouad 1er d'Entomologie, 31: 17–103.
- **Denis, J.** 1958. Araignées (Araneidea) de l'Afghanistan. I. *Videnskabelige Meddelelser fra den Naturhistorike Forenning i Kjöbenhavn*, **120**: 81–120.
- Dunlop, J.A., Penney, D., Dalüge, N., Jäger, P., McNeil, A., Bradley, R.S., Withers, P.J. & Preziosi, R.F. 2011. Computed tomography recovers data from historical amber: an example from huntsman spiders. *Naturwissenschaften*, **98**(6): 519–527
- Gabriel, R. 2011. Some notes on the development of the young and parasites of *Eusparassus* walckenaeri (Audouin, 1826) collected in Turkey (Araneae, Sparassidae). Newsletter of British Arachnological Society, 122: 9–12.
- Gravely, F.H. 1931. Some Indian spiders of the families Ctenidae, Sparassidae, Selenopidae and Clubionidae. *Records of the Indian Museum, Calcutta*, 33: 211–282.
- Jäger, P. 1999. Sparassidae the valid scientific name for the huntsman spiders (Arachnida: Araneae). Arachnologische Mitteilungen, 17: 1–10.
- Jäger, P. 2001. Diversität der Riesenkrabbenspinnen im Himalaya. Über eine Radiation zweier Gattungen in den Schneetropen. (Araneae: Sparassidae: Heteropodinae). Courier Forschungsinstitut Senckenberg, 232: 1–136.
- Jäger, P. & Kunz, D. 2005. An illustrated key to genera of African huntsman spiders (Arachnida, Araneae, Sparassidae). Senckenbergiana Biologica, 85: 163–213.
- Jäger, P. & Yin, C.M. 2001. Sparassidae in China. 1. Revised list of known species with new transfers, new synonymies and type designations (Arachnida: Araneae). *Acta Arachnologica*, **50**: 123–134.
- Järvi, T.H. 1912. Das Vaginalsystem der Sparassiden. I. Allgemeiner Teil. Annales Academiae Scientiarum Fennicae (A), 4: 1–131.
- Järvi, T.H. 1914. Das Vaginalsystem der Sparassiden. II. Annales Academiae Scientiarum Fennicae (A), 4: 132–248.
- Latreille P.A. 1804. Histoire naturelle générale et particulière des Crustacés et des Insectes. Paris, 7: 144–305.
- Latreille P.A. 1806. Genera crustaceorum et insectorum secundum ordinem naturalem in familias disposita, Iconibus exemplisque. Paris, 302 pp. (Araneae, pp. 82–127).
- Latreille P.A. 1817. Articles sur les Araignées. Dictionnaire (Nouveau) d'Histoire Naturelle, Nouvelle édition, Paris, art. 7–11, 13, 17–18.

Latreille P.A. 1818. Articles sur les Araignées. Dictionnaire (Nouveau) d'Histoire Naturelle, Nouvelle édition, Paris.

Moradmand, M. & Jäger, P. 2012. Taxonomic revision of the huntsman spider genus Eusparassus Simon, 1903 (Araneae: Sparassidae) in Eurasia. Journal of Natural History, **46** (39–40): 2439–2496.

Petrunkevitch, A. 1928. Systema Aranearum. Transactions of Connecticut Academy of Arts and Sciences, 29: 1-270.

Platnick, N.I. 2012. The world spider catalog, version 12.5. American Museum of Natural History, New York. Available from http://research.amnh.org/iz/spiders/catalog. (Accessed: 15 January 2012)

Reimoser, E. 1919. Katalog der echten Spinnen (Araneae) des paläarktischen Gebietes. Abhandlungen der Kaiserlich-Königlichen Zoologisch-botanischen Gesellschaft, 10(2):

1-280.

Roewer, C.F. 1928. Araneae. In: Zoologische Streifzüge in Attika, Morea, und besonders auf der Insel Kreta, II. Abhandlungen des Naturwissenschaftlicher Verein, Bremen, 27: 92-123.

Roewer, C.F. 1955. Die Araneen der Österreichischen Iran-Expedition 1949/50. Sitzungsberichte der Österreichischen Akademie der Wissenschaften (I), 164: 751-782.

Roewer, C.F. 1962. Araneae Dionycha aus Afghanistan II. Acta Universitatis Lundensis (*N.F.*), **58**(4): 1–34.

Schenkel, E. 1936. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas, unter Leitung von Dr. Sven Hedin and Prof. Su Ping-chang. Araneae gesammelt vom schwedischen Arzt der Expedition Dr. David Hummel 1927–1930. Arkiv för Zoologi, **29A** (1): 1–314.

Simon, E. 1880. Révision de la famille des Sparassidae (Arachnides). Actes de la Société

Linnéenne de Bordeaux, 34: 223-351.

Simon, E. 1902. Arachnides recueillis au cours de la Mission de MM. J. Bonnier et Ch. Perez au Golfe Persique (Mars-Avril 1901). Bulletin du Muséum d'Histoire Naturelle, Paris, 8: 252-254.

Simon, E. 1903. Histoire naturelle des Araignées. Encyclopédie Roret, Paris, 2: 669-1080.

Simon, E. 1909. Etude sur les arachnides recueillis au Maroc par M. Martinez de la Escalera en 1907. Mémorias de la Real Sociedad Española de Historia Natural, 6(1): 1-43.

Simon, E. 1932. Les arachnides de France. Pp. 773-978 in: Tome VI. Synopsis général et catalogue des espèces françaises de l'ordre des Araneae, 4e partie. Encyclopédie Roret, Paris.

Song, D.X., Zhu, M.S. & Chen, J. 1999. The spiders of China. 640 pp. Hebei Science & Technology Publishing House, Shijiazhuang.

Strand, E. 1906. Diagnosen nordafrikanischewaler, hauptsächlich von Carlo Freiherr von Erlanger gesammelter Spinnen. Zoologischer Anzeiger, 30: 604-637.

Strand, E. 1907. Spinnen des zoologischen Instituts in Tübingen. Zoologische Jahrbücher Systematik, 24, 391-468.

Strand, E. 1908. Nordafrikanische, hauptsächlich von Carlo Freiherr von Erlanger gesammelte Clubioniden. Archiv for Mathematik og Naturvidenskab, 29(2): 1-70.

Urones, C. 2006. El género Eusparassus Simon, 1903 (Araneae, Sparassidae) en la Península Ibérica, con la descripción de una especie nueva. Revista Ibérica de Aracnologia, 12: 99–115.

Walckenaer C.A. 1805. Tableau des aranéides ou caractères essentiels des tribus, genres, familles et races que renferme le genre Aranea de Linné, avec la désignation des espèces comprises dans chacune de ces divisions. 88 pp Paris.

Walckenaer C.A. 1806. Histoire naturelle des aranéides, vols. 1-3, 184 pp. Chez Amand König, Paris-Strasbourg,

Acknowledgement of receipt of this application was published in BZN 69: 84.

Comments on this case are invited for publication (subject to editing) in the Bulletin; they should be sent to the Executive Secretary, I.C.Z.N., c/o Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).